

Amendment and Response Under 37 C.F.R. §1.312

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Serial No.: 10/828,686

Confirmation No.: 4467

Filed: April 21, 2004

For: SYSTEMS AND METHODS FOR FORMING STRONTIUM- AND/OR BARIUM-CONTAINING LAYERS

Amendments to the Specification

Please replace the paragraph beginning at page 6, line 1, with the following amended paragraph.

In another embodiment, the present invention provides a method of manufacturing a memory device structure. The method includes: providing a substrate (preferably a semiconductor substrate or substrate assembly such as a silicon wafer) having a first electrode thereon; providing one or more Group IIA metal precursor compounds of the formula $M(NRR')_2$ $[[M(NRR')_4]]$, wherein R and R' are each independently an organic group and M is selected from the group consisting of barium, strontium, calcium, and magnesium; vaporizing the one or more precursor compounds; directing the one or more vaporized precursor compounds to the substrate to chemisorb the compounds on the first electrode of the substrate; providing one or more reaction gases; directing the one or more reaction gases to the substrate with the chemisorbed compounds thereon to form a dielectric layer on the first electrode of the substrate; and forming a second electrode on the dielectric layer.